R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE DRAWINGS

The drawings were objected to on the grounds that the feature of the upper and lower piston rings in sliding contact with the inner wall of the cylinder was not shown.

It is respectfully pointed out, however, that Fig. 2 shows upper piston rings 33 and lower piston rings 32 in contact with the inner peripheral wall surface of the cylinder 11 as recited in now canceled claim 2. As recited in amended claim 1, the at least one sterilizing agent-scraping member comprises the upper and lower piston rings 33, 32, and it is respectfully pointed out that movement of the piston 12 relative to the cylinder 11 causes the upper and lower piston rings 33, 32 to slide along the inner peripheral wall surface of the cylinder 11. See the disclosure in the specification at page 3, lines 7-9, and see also page 3, paragraph 5 of the Office Action, wherein the Examiner acknowledges that the sterilizing agent-scraping member is in sliding contact with the inner peripheral wall surface of the cylinder.

Accordingly, it is respectfully submitted that the feature of the upper and lower piston rings being in sliding contact with

the inner wall of the cylinder is shown in the drawings, and it is respectfully requested that the Examiner's objection to the drawings be withdrawn.

THE SPECIFICATION

The abstract has been amended to better comply with the requirements of MPEP 608.01(b), as required by the Examiner. No new matter has been added, and it is respectfully requested that the amendments to the abstract be approved and entered and that the objection to the abstract be withdrawn.

THE CLAIMS

Claim 1 has been amended to recite the features of the present invention formerly recited in now cancelled claim 2 whereby the at least one sterilizing agent-scraping member comprises an upper piston ring and a lower piston ring, the upper piston ring and lower piston ring are both arranged to project outward in a radial direction from an outer peripheral surface of the piston body and to slidably contact the inner peripheral wall surface of the cylinder, and the sterilizing agent-applying means comprises sterilizing agent arranged in a space defined between the piston, the cylinder, the upper piston ring and the lower piston ring.

With respect to the Examiner's comments relating to the subject matter of claim 2, now incorporated into claim 1, it is noted that the at least one scraping member is in sliding contact with the inner peripheral wall surface of the cylinder and that this scraping member comprises the upper and lower piston rings (described in the specification at page 3, lines 7-9). Thus, it is respectfully submitted that the recitation of the upper and lower piston rings being in sliding contact with the inner peripheral wall surface of the cylinder is supported by the disclosure, and that amended claim 1 is in full compliance with the requirements of 35 USC 112, second paragraph.

Claims 3 and 4, moreover, have been amended to depend from amended claim 1, and claims 1 and 3-9 have been amended to make some minor grammatical improvements and/or to correct some minor antecedent basis problems so as to put the claims in better form for issuance in a U.S. patent. In particular, it is noted that claims 6-9 have been amended to more clearly recite the features of the method for taking a core sample as described in the specification at page 11, line 6 to page 12, line 21.

Still further, new claims 10-19 have been added to recite additional features of the present invention disclosed in the specification and drawings.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and

entered, and that the rejection of claims 2-9 under 35 USC 112, second paragraph, be withdrawn.

THE PRIOR ART REJECTION

Claims 1-9 were rejected under 35 USC 102 as being anticipated by Masui et al (US 2002/0139583). This rejection, however, is respectfully traversed with respect to the claims as amended hereinabove.

According to the present invention as recited in amended independent claim 1, a core sample collector is provided which includes a cylinder and a piston movably arranged within the cylinder. As recited in amended independent claim 1, the piston includes a piston body, sterilizing agent-applying means for applying a sterilizing agent to an inner peripheral wall surface of the cylinder, and at least one sterilizing agent-scraping member for scraping the sterilizing agent from the inner peripheral wall surface of the cylinder after the sterilizing agent has been applied thereto. In addition, as recited in amended independent claim 1, the at least one sterilizing agent-scraping member comprises an upper piston ring and a lower piston ring both arranged to project outward in a radial direction from an outer peripheral surface of the piston body and to slidably contact the inner peripheral wall surface of the cylinder. As recited in amended independent claim 1, moreover, the sterilizing

agent-applying means comprises sterilizing agent arranged in a space defined between the piston, the cylinder, the upper piston ring and the lower piston ring.

Thus, with the structure of the present invention as recited in amended independent claim 1, relative movement between the cylinder and the piston causes the sterilizing agent from the sterilizing agent-applying means to be applied to the inner peripheral wall surface of the cylinder and thereafter, the sterilizing agent applied is scraped by the upper and/or lower piston ring(s).

It is respectfully submitted that Masui et al does not at all disclose, teach or suggest the above described features of the present invention as recited in amended independent claim 1.

In particular, it is respectfully submitted that Masui et al does not disclose at least one sterilizing agent-scraping member which comprises an upper piston ring and a lower piston ring as recited in amended independent claim 1. On page 4 of the Office Action, the Examiner asserts that upper piston ring 44 and lower piston ring 46 of Masui et al form a sterilizing agent-scraping member. However, in Masui et al, element 44 is a valve member of an on-off valve mechanism 45 which controls opening and closing of a gel-ejecting mechanism 42, and element 46 is a working disk of the valve mechanism 45. In addition, it is respectfully pointed out that in Masui et al, elements 44, 46 are arranged at

opposite ends of a connector rod 43 (see paragraph 0064). And it is respectfully submitted that the valve member 44 and working disk 46 of Masui et al are not comparable or equivalent to the upper and lower piston rings of the claimed present invention because the valve member 44 and working disk 46 of Masui et al do not slidably contact an inner peripheral wall surface of the cylinder. Instead, in Masui et al, the only member which contacts the inner peripheral wall surface of the cylinder 40 is a single ring-like sealing member 41.

In short, it is respectfully submitted that Masui et al fails to disclose, teach or suggest piston rings which slidably contact an inner peripheral wall surface of a cylinder and which also define a space, together with a piston and the cylinder, in which sterilizing agent is arranged, as according to the present invention as recited in amended independent claim 1.

In view of the foregoing, it is respectfully submitted that amended independent claim 1, and amended claims 3-9 and new claims 10-19 depending therefrom, clearly patentably distinguish over Masui et al under 35 USC 102 as well as under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

/Douglas Holtz/

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